



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,926	11/09/2001	Eric D. Morrison	456.003US1	5615

7590

04/02/2004

MARK A. LITMAN & ASSOCIATES, P.A.  
York Business Center  
Suite 205  
3209 W. 76th St.  
Edina, MN 55402

EXAMINER

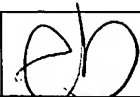
SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	Application No. 10/010,926	Applicant(s) MORRISON ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 March 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 16 March 2004. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 6,8 and 10.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1,3-5,11-16.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Callie E. Shosho  
Primary Examiner  
Art Unit: 1714

**Attachment to Advisory Action**

1. Applicants' amendment filed 3/16/04 has been fully considered it has not been entered given that the amendment raises new issues that would require further consideration.

Specifically, applicants' amendment to claim 15 raises new issues under 35 USC 112, second paragraph.

In the office action mailed 12/23/03, claim 15 was rejected under 35 USC 112, second paragraph. The examiner noted that claim 15, which depends on claim 11, recited "said polymer" has weight average molecular weight between 50,000 and 150,000 and that the scope of the claim was confusing given that claim 11 recited both first polymer and second polymer and thus, it was not clear which polymer was being referred to in claim 15, the first or second polymer.

In response, in the after-final amendment filed 3/16/04, claim 15 was amended to recite "said first polymer". Additionally, applicants note on page 6 of the amendment that as the limitation of original claim 15 applied to the then only polymer recited in claim 11, the term must still apply to that polymer, the first polymer surface-treating the pigment. However, claim 11 refers to "organosol carrying a first polymer" and "colorant pigment particles surface-treated by a second polymer". Thus, by amending claim 15 to recite "said first polymer", the molecular weight of claim 15 refers to the molecular weight of the polymer of the organosol not the polymer surface-treating the pigment.

Thus, the scope of claim 15 is confusing because it is not clear what polymer applicants are referring to in the claim. By amending the claim to recite "said first polymer" and in light of the disclosure of claim 11 (the claim on which claim 15 depends), the molecular weight now refers to the polymer of the organosol. However, applicants' comments on page 6 of the

Art Unit: 1714

amendment suggest that the molecular weight of claim 15 should refer to the molecular weight of the polymer used to treat the surface of the pigment. Thus, it is not clear what polymer possesses the molecular weight of 50,000-150,000 - the polymer of the organosol or the polymer used to treat the pigment. It is further noted that if the former is true, i.e. claim 15 should refer to the weight average molecular weight of the polymer of the organosol, such amendment would also raise new issues under 35 USC 112, first paragraph because there does not appear to be any support in the specification as originally filed that the polymer of the organosol possess weight average molecular weight of 50,000-150,000. While there is support for the recitation that the graft stabilizer portion of the organosol possess number average molecular weight of 50,000-1,000,00, more preferably 100,000 to 500,000, and most preferably 100,000 to 300,000 as set forth on pages 7, lines 21-24 of the present specification, there is no support for the recitation that the polymer of the organosol, i.e. first polymer as referred to in claim 11, possess weight average molecular weight of 50,000-150,000.

It is further noted that even if the amendment were entered, the claims would not be allowable over the "closest" prior art for the following reasons.

Specifically, applicants argue that in the office action mailed 12/23/03, the examiner incorrectly stated that Uytterhoeven et al. (U.S. 4,663,265) does not disclose reacting polymers.

However, examiner agrees with applicants' position that Uytterhoeven et al. discloses, teaches, and requires the reaction of polymer A and polymer B. What the examiner was trying to clarify on page 4, third full paragraph under paragraph 7 in the office action mailed 12/23/03 is

that while Uytterhoeven et al. disclose the reaction between two polymers, it is not the reaction between nitrogen-containing polymer and polymer contained in the organosol. That is, on page 9, of the amendment filed 10/20/03, applicants had argued that in the present invention "there is no requirement or teaching that the nitrogen-containing polymer used to treat the pigment surface be chemically reacted with the second polymer of the organosol". In response, the examiner was pointing out that while Uytterhoeven et al. disclose reaction between two polymers, i.e. polymer A and polymer B, the reaction is not between nitrogen-containing polymer and polymer contained in the organosol, but rather is between nitrogen-containing polymer and additional polymer. This product is then subsequently combined with organosol as disclosed by Baker et al. Polymer A and polymer B disclosed by Uytterhoeven et al. are separate from the polymer contained in the organosol.

While there is no disclosure in the present claims of treating the pigment with two polymers, in light of the open language of the present claims, i.e. "process comprising", such reaction is clearly not excluded from the scope of the present claims. That is, in light of the open language of the claim, claim 1 is open to the inclusion of additional steps such as reacting the treated colorant pigment particles which possess outer layer of nitrogen-containing polymer as found in presently claimed step (c) with additional polymer such as polymer B as disclosed by Uytterhoeven et al. Further, it is noted that present claim 11 discloses colorant pigment particles surface treated by a second polymer. However, this does not exclude the pigment from further treatment. That is, even though Uytterhoeven et al. disclose pigment treated with second polymer which is then further reacted with an additional polymer, the fact remains that Uytterhoeven et

Art Unit: 1714

al. disclose pigment treated with second polymer and thus meets the limitations of the present claim 11.

It is noted that there is no disclosure in Uytterhoeven et al. of dispersing such treated pigment in organosol. This is why Uytterhoeven et al. is combined with Baker et al. which teaches dispersing pigment in organosol. The organosol is separate from the polymers associated with the pigment.

Applicants also argue that the organosol disclosed by Baker et al. is not soluble in liquids having a Kauri-Butanol number greater than 30. However, it is noted that there is no requirement in the present claims that organosol is soluble in such solvent. The present claims require that the nitrogen-containing polymer dissolves in a solvent with Kauri-Butanol number greater than 30 which is disclosed by Uytterhoeven et al. (col.10, lines 39-43) and that the treated pigments are dispersed in organosol containing a polymer carried in a carrier liquid having Kauri-Butanol number less than 30 wherein such organosol is disclosed by Baker et al. (col.45, lines 15-18).

Applicants also argue that given that Uytterhoeven et al. and Baker et al. each disclose stable pigment dispersion, there is no motivation to combine the references.

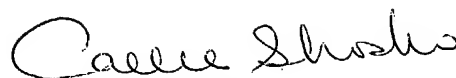
However, there is no disclosure in Uytterhoeven et al. to prevent further improvement in stability. Further, Baker et al. disclose that dispersing pigment in organosol not only improves sedimentation stability of the pigment but also does so without comprising pigment quality. Baker et al. further disclose that dispersing pigment in organosol also allows for improved redispersion characteristics upon settling.

Application Number: 10/010,926

Page 6

Art Unit: 1714

Thus, it is the examiner's position that there is good motivation to combine Uytterhoeven et al. with Baker et al.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
3/30/04